

# Application for Certification as an Eligible Energy Resource Under the Delaware Renewable Energy Portfolio Standard

1.	Name of Facility  Herr, Charlotte Residence - C Herr  Facility Address					
2.						
	4613 Griffin Drive,					
	Wilmington, DE 19808					
	Is the facility located within the PJM control area?	<b>⊠</b> Yes	□ No			
	If No, does the Facility have import capabilities <sup>1</sup> ?	☐ Yes	□ No			
3.	Name of Owner					
	Charlotte Herr					
	Mailing Address					
	4613 Griffin Drive, Wilmington, DE 19808					
	Phone <u>3026602981</u> Fax					
	Email herrwrk@yahoo.com					
4.	Name of Operator					
	same as owner					
	Mailing Address					
	Phone Fax					
	Email					

<sup>&</sup>lt;sup>1</sup> Documentation will be required to substantiate import capabilities into PJM

5.	Name of Contact Person Nancy Strahan, SRECTrade, Inc.		
	Mailing Address		
	201 California Street, Suite 630		
	San Francisco, CA 94111		
	Phone 1-877-466-4606 Fax 1-732-453-0065		
	Email applications@srectrade.com		
6.	Name of REC/SREC Owner same as owner		
	Mailing Address		
	Phone Fax		
	Email		
7.	List all PJM-EIS GATS State Certification Numbers assigned to this facility:		
8.	Operational Characteristics:		
	Fuel Types Used (check all that apply):		
	lacksquare Gas combustion from the anaerobic digestion of organic material		
	☐ Geothermal		
	☐ Ocean, wave or tidal actions, currents, or thermal differences		
	☐ Qualified Biomass <sup>i</sup>		
	☐ Qualified Fuel Cells <sup>ii</sup>		
	☐ Qualified Hydroelectric <sup>iii</sup>		
	☐ Qualified Methane Gas captured from a landfill gas recovery system <sup>iv</sup>		

☑ Solar				
☐ Wind				
If co-firing, provide the formula on file with PJM Environmental Information				
Services, Inc. (PJM-EIS) n/a				
Rated Capacity (in megawatts - DC)				
If multiple fuel types are utilized, attach the formula for computing the portion of output per fuel type by megawatts per hour generated.				
Facility Final Approved Interconnection Date 02/20/2018				
If co-firing with fossil fuels, co-fire start date				
If co-firing with fossil fuels, attach the allocation formula on file with PJM.				
Is the Applicant's facility customer-sited generation ?  ☑ Yes ☐ No				
Is the Applicant's facility a community owned generating facility <sup>vi</sup> ?  ☐ Yes				
Can the output from the customer-sited generation be appropriately metered?  ☐ Yes ☐ No				

9.

50% of the cost of the renewable energy equipment, inclusive of mounting components, manufactured in Delaware?		
☐ Yes* No		
American Design and Build Company Name of Installer  221 Gateway Drive Address Bel Air, MD 21014  American Design and Build Signature of Company Representative  Adam Kollar Print Name of Co. Representative		
Address		
*If Yes, please attach the following documentation:  • A copy of the supplier's invoice showing Delaware manufactured equipment with this facility identified  • If the supplier's invoice shows only a coded Purchase Order (PO) number, a copy of the company's matching PO that includes the address where the materials were used/installed, must also be supplied  • If using a master invoice, a record of the draws against the purchased quantity, or the master invoice, must show the address of each use and the quantity of materials used	n	
11. If the Applicant's installation is solar or wind sited in Delaware:		
<ul> <li>a. Was the facility physically constructed or installed with a workforce that consists of at least 75% Delaware residents?</li> <li>Yes*</li> </ul>		
b. Does the installing company employ, in total, a minimum of 75% workers who are Delaware residents?	S	
Yes* No		
American Design and Build  Company Name of Installer  Signature of Company Representative		
Address Address Print Name of Co. Representative  Address Address		

10. If the Applicant's installation is solar or wind sited in Delaware, is a minimum of

<sup>\*</sup>If Yes, please attach supporting documentation (see pages 7-8 for details). Please note, in order to qualify for the Labor/Workforce Bonus, at least one of the options (a. or b.) must be met.

- ı, Nancy Strahan (print name) hereby certify under penalty of perjury that
  - 1. I have made reasonable inquiry, and the information contained in this Application is true and correct to the best of my knowledge, information and belief.
  - 2. I am authorized to submit and execute this Application and to bind myself and/or my company to the representations contained herein.
  - 3. I/my company agree(s) to comply with and be subject to the jurisdiction of the Public Service Commission of the State of Delaware for any matters arising out of my submission of this Application or the granting of the Application.
  - 4. In the event that any of the information contained in this Application changes pending the consideration of this Application or after the Application is granted, I/my company will amend the Application to provide the Commission with such changed information.
  - 5. I acknowledge that if any of the representations made in this Application or in any amendment thereto are found to be untrue when made, I/the company may be subject to sanctions, including but not limited to monetary fines and/or the revocation of any Certificate granted as a result of the representations made in this Application.

Date: 07/05/2018	Signature: <sub>.</sub>	Many Str
	Date:	07/05/2018

#### **Required Documentation:**

- If the facility is customer-sited generation, attach a copy of the utility's Final Approved Interconnection Agreement
- One copy of U.S. Department of Energy, Energy Information Administration Form EIA-860, if rated capacity is >1.0 MW

- 1. Increased production of landfill gas from production facilities in operation prior to January 1, 2004 demonstrates a net reduction in total air emissions compared to flaring and leakage;
- 2. Increased utilization of landfill gas at electric generating facilities in operation prior to January 1, 2004 (i) is used to offset the consumption of coal, oil, or natural gas at those facilities, (ii) does not result in a reduction in the percentage of landfill gas in the facility's average annual fuel mix when calculated using fuel mix measurements for 12 out of any continuous 15 month period during which the electricity is generated, and (iii) causes no net increase in air emissions from the facility; and
- Facilities installed on or after January 1, 2004 meet or exceed 2004 Federal and State air emission standards, or the Federal and State air emission standards in place on the day the facilities are first put into operation, whichever is higher.

<sup>&</sup>lt;sup>i</sup> "Qualified Biomass" means electricity generated from the combustion of biomass that has been cultivated in a sustainable manner as determined by Delaware Department of Natural Resources and Environmental Control (DNREC), and is not combusted to produce energy in a waste to energy facility or in an incinerator.

<sup>&</sup>quot;"(Qualified Fuel Cells" means electricity generated by a fuel cell powered by Renewable Fuels, as that term is defined in Section 1.0 of the Rules and Procedures to Implement the Renewable Energy Portfolio Standard, Delaware Public Service Commission Regulation Docket No. 56.

<sup>&</sup>quot;" "Qualified Hydroelectric" means electricity generated by a hydroelectric facility that has a maximum design capacity of 30 megawatts or less from all generating units combined that meet appropriate environmental standards as determined by DNREC.

<sup>&</sup>quot;" "Qualified Methane Gas" means electricity generated by the combustion of methane gas captured from a landfill gas recovery system; provided, however, that:

v "Customer-sited Generation" means a generating unit that is interconnected on the end use customer's side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the end-use customer.

<sup>&</sup>quot;"Community-owned Energy Generating Facility" means a renewable energy generating facility that has multiple owners or customers who share the output of the generator, which may be located either as a stand-alone facility or behind the meter of a participating owner or customer. The facility shall be interconnected to the distribution system and operated in parallel with an electric distribution company's transmission and distribution facilities.

#### **Documentation Required for Delaware Labor/Workforce Bonus**

- 11. If the Applicant's installation is solar or wind sited in Delaware:
  - a. Was the facility physically constructed or installed with a workforce that consists of at least 75% Delaware residents?

If you answered yes to "a." above, complete the following as evidence.

The following individuals (list every employee) were employed by

Installation Company Name

as direct labor (physical construction and installation) for this facility: (Attach additional sheets if necessary)

Please complete the following information for all individuals listed above:

Name	Home Address City, State only (As per Tax Withholding)	Social Security Number (Last 2 digits only)

Total Delaware Resident Employees:\_\_\_\_\_\_ Total Number of Employees:\_\_\_\_\_

% of Delaware Residents (Delaware Residents Divided by Total Employees): \_\_\_\_\_\_

## **Documentation Required for Delaware Labor/Workforce Bonus**

- 11. If the Applicant's installation is solar or wind sited in Delaware:
  - b. Does the installing company employ, in total, a minimum of 75% of workers who are Delaware residents?

Installation Company Name

If you answered yes to "b." above, complete the following as evidence:

ect Start Date:	Project Complete Date:	
Employee Full Name	Home Address City, State Only (As per Tax Withholding)	Social Security Number (Last 2 dig Only)



A PHI Company

## PART 1

# **DELAWARE LEVEL 1 INTERCONNECTION APPLICATION & AGREEMENT**

With Terms and Conditions for Interconnection (Lab Certified Inverter-Based Small Generator Facilities Less than or Equal to 10 kW) (Application & Conditional Agreement – to be completed prior to installation)

INTERCONNECTION CUSTOMER	CONTACT INFORMA	TION	
Customer Name: Charlotte Herr			
Mailing Address: 4613 Griffin Drive			
City: Wilmington			
Contact Person/Authorized Agent (II	other than above):		
Mailing Address (If other than above):			
Telephone (Daytime): 302-660-298	(Evening):		
Fax Number: E-Mai	Address (Required): h	errwrk@yahoo.com	
Alternate Project Contact Informa	tion: (if different from Cust	omer-Generator above)	
Alternate Name:			
Mailing Address:			
City:			
Telephone (Daytime):			
Fax Number: E-Mail Address:			
If an email is provided for your alternate contact, that contact will receive all email communications.			
FACILITY INFORMATION			
Facility Address: 4613 Griffin Driv	te		
City: Wilmington	YARRA ARABA	Zip Code: 19808	
		, <del>, , , , , , , , , , , , , , , , , , </del>	
DPL Account #:	Meter #	k:	
Current Annual Energy Consumption	n (optional): kWh		
Check if this Facility (building) is, or is going to be, NEW CONSTRUCTION: □			
Estimated Commissioning Date: ass	<u>ip</u>		
Energy Source: Solar	Prim	e Mover: photovoltaic	

plate Rating:4.56(kW), 4(kW), pacity <sup>4</sup> : _3.92(kW) <u>3 92(kVA)</u>			
Added Rating (if upgrade): DC Generator Total Nameplate Rating: (kW),  AC Inverter Total Rating (kW),  AC System Design Total Capacity: (kW) (kVA)			
ate Rating: <u>4.56</u> (kW), (kW), pacity: <u>3.92</u> (kW)(kVA)			
r World SW 285 Plus			
may also be submitted			
Axis 🗌			
PV:			
(Separate with comas)			
of Inverter7: M250			
nutated X Line Commutated			
Ampere Rating: 200 Amps <sub>Ac</sub> , Number of Phases: X 1 3			
Nominal Voltage Rating: VAC, Nominal DC Voltage: VDC,			
Power Factor: %, Frequency: Hz, Efficiency: (%)			
DPL Taggable, Lockable, Accessible Disconnect <sup>9</sup> : X Yes ☐ No,			
If Yes, Location: Next to Meter			
One-line Diagram Attached (Required): X Yes No.			
Site Plan Attached (Required): X Yes No			
Do you plan to export power? 10 Yes No, If Yes, Estimated Maximum: kWac			
Estimated Gross Annual Energy Production: kWh			
Is the inverter IEEE/UL1741 lab certified? Yes X No (If yes, attach manufacturer's cut sheet showing listing and label information from the appropriate listing authority, e.g. UL 1741 listing. If no, facility is not eligible for Level 1 Application.)			
Initial if first time generator request. Addition/Upgrade if this is an add-on to a previously approved system.  Sum of all generators or PV Panels  Sum of all inverters  This will be your system design capacity based upon your unique system variables.  If more than one type, please list all manufactures and model numbers.  If more than one manufacture, please list all.  If more than one model number, please list all.  Attach additional sheets as necessary in the event of multiple inverters of various types/sizes  This is strongly recommended by the utility. Best practice is to have an externally accessible, lockable, disconnect with visible open/close connection and to have appropriate signage on the disconnect, such as 'Solar PV AC Disconnect' (preferably red) and on the meter housing 'Caution, Solar Electric System' (preferably yellow). If the disconnect is not in the immediate vicinity of the meter, please include the disconnect location on the meter signage. This enables the utility and first responders to more quickly deal with an emergency situation.  Yes, if your expected maximum output of the inverter (kW AC) is greater than the lowest load you anticipate at your facility during maximum PV output (kW). The difference would be the amount you may export.			

DocuSign Envelope ID: 09586826-4693-4D9C-B059-E606CFC67C09

EQUIPMENT INSTALLATION CONT	TRACTOR Owner (Cus	tomer) Installed:  Yes  No
Contractor Name: American Design	n And Build	
Mailing Address: 221 Gateway Dr		
City: Bel Air	State: MD	Zip Code: 21014
Telephone (Daytime): 410-557-0555	(Evening):	
Fax Number: E-Mail		
ELECTRICAL CONTRACTOR		
Electrical Contractor Name:		711.
Mailing Address:		
City:		
Telephone (Daytime):	(Evening):	
Fax Number:		
License number:		
Is small generator facility eligible for t	Net Metering? Yes K No.	П
The attached terms and conditions conditions indemnification, and should be careful. The interconnection customer is not recoverage as a precondition for interconstomer is advised to consider obtain interconnection customer's potential Interconnection customer's potential Interconnection customer's potential Interconnection customer's potential Interest certify that: 1) I have read an interconnection customer in the customer's potential Interest certify that: 1) I have read an interest certification in the consideration in the certification in the certific	ally considered by the inter- required to obtain general lannection approval; however, ining appropriate insurance inability under this agreement and understand the terms as	connection customer. liability insurance ver, the interconnection e coverage to cover the ent.  and conditions which are attached
hereto by reference and are a part of attached terms and conditions; and 3 in this application request form is cominterconnecting utility to exchange infapplication applies.  Interconnection Customer Signature	) to the best of my knowled plete and true. I consent ormation regarding the geometric processions of the procession of the processi	dge, all of the information provided to permit the PSC and nerating system to which this
Printed Name:Title:		

Page 4



## PART 2

## **DELAWARE INTERCONNECTION APPLICATION & AGREEMENT**

With Terms and Conditions for Interconnection (Lab Certified Inverter-Based Small Generator Facilities Less than or Equal to 10 kW) (Final Agreement - must be completed after installation and prior to interconnection)

## Certificate of Completion<sup>11</sup>

INTERCONNECTION CUSTOMER CONTACT INFORMATION

Customer Name: Charlotte Herr			
Mailing Address: 4613 Griffin Drive			
City: Wilmington State: DE Zip Code: 19808			
Telephone (Daytime): 302-660-2981 (Evening):			
Fax Number: E-Mail Address: herrwrk@yahoo.com			
FACILITY INFORMATION			
Facility Address: 4613 Griffin Drive			
City: 4613 Griffin Drive State: DE Zip Code: 19808			
DPL Account #: Meter #:			
Energy Source: Solar World SW 285 Prime Mover: Photovoltaic			
Inverter Type: Forced Commutated X Line Commutated			
Number of Inverters: 16			
Inverter Manufacturer: Enphase Model Number(s) of Inverter: solar World SW 285			
Pating  DC Generator Total 12 Nameplate Rating: 4.56 (kW),  AC Inverter Total 13 Rating 4.0 (kW),  AC System Design Total Capacity 14: 3.92 (kW) 3.92 (kVA)			
Generator (or PV Panel) Manufacturer, Model #15:Solar World SW 285			

<sup>11</sup> Information entered here on Certificate of Completion (Part 2) must match part 1

Sum of all generators or PV Panels

Sum of all inverters

13 Sum of all inverters

14 This will be your system design capacity based upon your unique system variables.

15 If more than one type, please list all manufactures and model numbers.

EQUIPMENT INSTALLATION CONTRACTOR Owner (Customer) Installed: Yes No			
Contractor Name: American Design And Build			
Mailing Address: 221 Gateway Drive			
City: Bel Air	State: MD Zip Code: 21014		
	(Evening):		
Fax Number:	E-Mail Address: adbuildica@gmail.com		
FINAL ELECTRIC INSPECTION AND INT	ERCONNECTION CUSTOMER SIGNATURE		
The Small Generator Facility is complete and has been approved by the local electric inspector having jurisdiction. A signed copy of the electric inspector's form indicating final approval is attached. The Interconnection Customer acknowledges that it shall not operate the Small Generator Facility until receipt of the final acceptance and approval by the EDC as provided below.  Signed:  Date 11/13/2017  Charlotte Herr  Check if copy of signed electric inspection form is attached			
ACCEPTANCE AND FINAL APPROVAL FOR INTERCONNECTION (for EDC use only)			
The interconnection agreement is approved and the Small Generator Facility is approved for interconnected operation upon the signing and return of this Certificate of Completion by EDC:			
Electric Distribution Company waives Witness Test? (Initial) Yes () No () If not waived, date of successful Witness Test: Passed: (Initial) ()			
EDC Signature:	Date:		
Printed Name:	Title:		

First State Inspection Agency, Inc. 1001 Mattlind Way Milford, DE 19963

> 1-800-468-7338 302-422-3859

A.M.P. Electric Chad Perkins 54 Cree Terrace Rising Sun MD 21911

## **CERTIFICATE**

Final Inspection Date:

1-31-18

Application #:

0432688

Owner:

Charlotte Herr

Occupancy:

4.56 KW Solar Array

Location:

Lot 40 Limestone Acres, 4613 Griffin Drive

Wilmington, New Castle Co., DE

This certifies that the installation of electrical equipment listed on referenced application has been approved as meeting the requirements of the National Electric Code, utility, municipalities and Agency rules. Any modification, addition or alteration of the electrical system, after the date of final inspection, will require a new application for inspections and certifications.

Chief Electrical Inspector